

REMARKS

Applicants would like to thank the Examiner, Devon C. Kramer, for the telephone interview with Applicants' representative, David W. Dorton, on August 14, 2003. During the interview, independent claims 1, 3, 6, 11 and 18 were discussed, as described in more detail below.

Claims 1-18 remain pending in the application. Claims 5, 10 and 13-17 were allowed and claims 1-4, 6-9, 11, 12 and 18 stand rejected. New claims 19 and 20 have been added by this amendment. Applicants submit that all pending claims are in complete condition for allowance and respectfully request reconsideration of the rejected claims. The following remarks are respectfully submitted.

Claims Rejected Under 35 U.S.C. § 102

Claims 1, 2, 11 and 12 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,207,300 to Engel et al. Claims 1 and 11 are the only independent claims of this rejected group and are directed to a suspension damper comprising:

an air pressure actuated control valve assembly responsive to an air pressure input for adjustment to and between an open position, a closed position, and at least one position intermediate the open and closed positions to control the movement of fluid in the passage between the extension and compression chambers.

Applicants respectfully traverse the Examiner's rejections of claims 1 and 11 because Engel et al. does not teach or suggest adjustment of a valve

assembly to "at least one position intermediate the open and closed positions to control the movement of fluid in the passage between the extension and compression chambers," as recited in the claims. Rather, when control body (8) of Engel et al. is moved downward by pressurized membrane (13) to close bypass (5), flow is only through valves (4a) and (4b) (see Engel et al. at column 4, lines 13-18) to provide a high damping. Likewise, when control body (8) is moved upwardly, by interruption of pressure to membrane (13) and corresponding high pressure exposed to surface (11) of control body (8), flow is through valves (4a, 4b) and (6a, 6b) via bypass (5) to provide a soft damping (see Engel et al. at column 4, lines 41-46). Therefore, Engel et al. does not teach or suggest adjustment of a control valve to and between open, closed, and intermediate positions.

Contrary to the assertion in the final Office Action at page 7, hole or boring (15) is not a flow passage for damping. Rather, boring (15) equalizes the pressure on both sides of the lower end (8b) of control body (8) to facilitate upward movement of the control body (8). In other words, boring (15) does not account for any flow between the extension and compression chambers, as recited in claims 1 and 11. During the telephone interview on August 14, 2003, the Examiner agreed that boring (15) did not operate as a flow passage as alleged in the final Office Action.

Nevertheless, the Examiner asserts that the claim language "does not state that the valve is maintained in an intermediate position to control fluid flow" (see final Office Action at page 7). Applicants respectfully disagree. Claims 1 and

11 specifically state that the control valve assembly is adjustable "to and between an open position, a closed position, and at least one position intermediate the open and closed positions to control the movement of fluid" (emphasis added).

Operation of the claimed suspension damper in this manner is disclosed in the application at page 15, lines 8-15. Accordingly, Applicants submit that the Examiner has not given full weight to each and every element of the claims. Specifically, the interpretation of claims 1 and 11 asserted by the Examiner would make the recitation of the words "to and" in the phrase "adjustment to and between" mere surplusage. Such interpretation of the claim is improper. For at least these reasons, Applicants respectfully request that the rejections of claims 1 and 11 over Engel et al. be withdrawn.

Claims 2 and 12 each depend from claims 1 and 11, respectively, and therefore are in condition for allowance for at least the reasons stated above for claims 1 and 11. Accordingly, Applicants respectfully request that the rejections of claims 2 and 12 be withdrawn.

Claims Rejected Under 35 U.S.C. § 103

Claims 3 and 4 were rejected as being unpatentable over Engel et al. in view of U.S. Patent No. 5,038,897 to Wells et al. Claim 3 is the only independent claim of this rejected group and is directed to a suspension damper comprising "a resistance welded interface between the rod and the piston . . . wherein the resistance welded interface provides a fluid tight seal." Applicants respectfully traverse the rejection of claim 3 because Engel et al. does not teach welding to

provide a fluid tight seal between the rod and the piston. The combination of Engel et al. with Wells et al. fails to cure this deficiency. During the telephone interview on August 14, 2003, the Examiner agreed that neither Engel et al. nor Wells et al. teaches or suggests the use of a weld to provide a fluid tight seal, as noted in the Interview Summary. As stated in the Amendment filed July 2, 2003, there is no need for Wells et al. to have a fluid tight seal between the piston and rod because the rod is not used as a communication path for pressurizing the piston. Accordingly, Wells et al. merely teaches that rods can be welded. The Examiner's combination of Engel et al. with Wells et al. to produce the fluid tight seal recited in claim 3 can only be the result of improper hindsight reconstruction using Applicants' disclosure. For at least these reasons, Applicants respectfully request that the rejection of claim 3 be withdrawn.

Claim 4 depends from independent claim 3 and therefore is in condition for allowance for at least the reasons stated above for claim 3. Accordingly, Applicants respectfully request that the rejection of claim 4 be withdrawn.

Claims 6-8 were rejected under 35 U.S.C. §103(a) as being unpatentable over Engel et al. in view of U.S. Patent No. 5,725,239 to de Molina. Claim 6 is the only independent claim of this rejected group and is directed to a suspension system for a vehicle comprising:

a pneumatic suspension subsystem generating an air pressure value as a function of a weight of the vehicle

and a condition of the road on which the vehicle travels;
and

at least one damper comprising:

an air pressure actuated control valve assembly
responsive to an air pressure input for adjustment to and
between a plurality of positions to control the movement
of fluid in the passage between the extension and
compression chambers.

The Examiner admits that Engel et al. does not teach controlling a valve in response to a function of weight and a condition of the road. The Examiner alleges that it would have been obvious to modify the device of Engel et al. according to de Molina to overcome this deficiency. However, as noted in the Amendment filed July 2, 2003, de Molina is directed to a variable suspension system which includes a shock absorber having a slidably moveable piston (94) separating a cavity (92) of the shock absorber into compression and extension chambers (96, 98). A variable valve assembly (110) is coupled to a fluid reservoir (102) disposed outside of the cavity (92). It is the external valve assembly (110) which is pneumatically controlled and not the piston (94) which separates the compression and extension chambers (96, 98). Thus, de Molina teaches the use of a twin tube hydraulic shock wherein a valve controls the movement of fluid between the inner and outer tubes and not between the extension and compression chambers, as set forth in claim 6. Accordingly, de Molina does not teach a modification of Engel et al. which would produce the claimed invention, and the Examiner's rejection in this regard amounts to picking and choosing among the

teachings of the prior art using Applicants' disclosure. For at least these reasons, Applicants respectfully request that the rejection of claim 6 be withdrawn.

Claim 7 and 8 each depend from independent claim 6 and therefore are in condition for allowance for at least the reasons stated above for claim 6. Accordingly, Applicants respectfully request that the rejections of claim 7 and 8 be withdrawn.

Claim 18 was rejected under 35 U.S.C. §103(a) as being unpatentable over Engel et al. in view of U.S. Patent No. 5,690,195 to Kruckemeyer et al. During the interview on August 14, 2003, the Examiner agreed that the combination of Engel et al. with Kruckemeyer et al. does not teach the claimed invention, as noted in the Interview Summary. Accordingly, Applicants respectfully request that the rejection of claim 18 be withdrawn, as indicated in the Interview Summary.

New Claims

New claims 19 and 20 have been added by this Amendment. Claims 19 and 20 are similar to claims 1 and 11, respectfully, modified to recite language suggested by the Examiner relating to maintaining the valve assembly in open, closed, or intermediate positions. While Applicants believe that claims 1 and 11 are in condition for allowance, new claims 19 and 20 have been added as suggested by the Examiner. Applicants submit that claims 19 and 20 find support in the application at page 15, lines 8-15 and therefore do not add new matter.

Accordingly, Applicants respectfully request entry and allowance of claims 19 and 20.

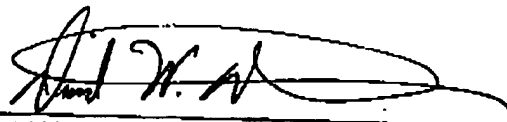
In view of the foregoing remarks given herein, Applicants respectfully believe this case is in complete condition for allowance and respectfully request reconsideration of the pending rejected claims. If the Examiner believes any detailed language of the claims requires further discussion, the Examiner is respectfully asked to telephone the undersigned attorney so that the matter may be promptly resolved. The Examiner's prompt attention to this matter is appreciated.

Applicants are of the opinion that an additional fee of \$ 84.00 is due as a result of this Amendment. Please charge Deposit Account No. 23-3000 in the amount of \$ 84.00 to Deposit Account No. 23-3000. If any additional charges or credits are necessary to complete this communication, please apply them to Deposit Account No. 23-3000.

Respectfully submitted,

WOOD, HERRON & EVANS, L.L.P.

By:



David W. Dorton, Reg. No. 51,625

2700 Carew Tower
441 Vine Street
Cincinnati, OH 45202
(513) 241-2324 (voice)
(513) 421-7269 (facsimile)